



US 20140313948A1

(19) **United States**(12) **Patent Application Publication**  
**Jänis et al.**(10) **Pub. No.: US 2014/0313948 A1**(43) **Pub. Date: Oct. 23, 2014**(54) **FRAME STRUCTURE AND SIGNALING  
ARRANGEMENT FOR INTERFERENCE  
AWARE SCHEDULING**(75) Inventors: **Pekka Jänis**, Espoo (FI); **Cássio  
Ribeiro**, Espoo (FI); **Klaus Hugel**, Wien  
(AT)(73) Assignee: **Nokia Corporation**, Espoo (FI)(21) Appl. No.: **13/976,651**(22) PCT Filed: **Jan. 4, 2011**(86) PCT No.: **PCT/IB2011/050025**

§ 371 (c)(1),

(2), (4) Date: **Jul. 31, 2013****Publication Classification**(51) **Int. Cl.****H04W 24/10** (2006.01)**H04L 5/00** (2006.01)**H04L 5/14** (2006.01)(52) **U.S. Cl.**CPC ..... **H04W 24/10** (2013.01); **H04L 5/14**  
(2013.01); **H04L 5/003** (2013.01)USPC ..... **370/280**; **370/329**

(57)

**ABSTRACT**

Frame structures and signaling arrangements for interference aware scheduling may be applicable to a local area radio system to complement existing wide area cellular systems, like GSM/UMTS/HSPA/LTE. In certain embodiments a method is provided including preparing a frame for transmission in a wireless communication system. The method can also include incorporating an interference report into the frame. The interference report is directly associated with a corresponding resource. The method can further include transmitting the interference report within the frame in the wireless communication system.

